QUICK COMPRESS
from PROSOFT

QUICK COMPRESS (hereafter called "QUICK") is a machine-language program for the TRS-80 Models I and III computer. It reduces the memory requirements of most BASIC programs by deleting remarks and blanks (except within strings). QUICK offers the following advantages:

* occupies only 276 bytes of memory, so it can compress programs that are too large to be processed by other compression utilities;

* runs very fast, conserving your valuable time: an 800-line BASIC program, containing multiple statements per line, is processed in less than three seconds;

* does not combine lines of code, thereby preserving the clarity of the original, fully commented BASIC program. This feature does provide less potential compression than some other utilities, and when maximum compression is required, QUICK can be used as a "pre-processor": because it needs so little memory for itself, it can compress a large BASIC program sufficiently to leave room for a line-combining compressor;

* offers six compression options:

        * delete only blanks between statements and their remarks
        * delete only remarks, not blanks
        * delete remarks and any lines containing no code
        * delete remarks and blanks (except within strings)
        * delete remarks, blanks, and lines containing no code
        * lines beginning with a colon (':') are not compressed

* self-relocating on all tape and disk systems, 16-48K

INSTALLATION

Tape Systems

The distribution tape contains four identical copies of the System program: QUICK. The tape is ready for use and requires no installation. To use it:

1. Power on your computer.
2. Reply to the MEMORY SIZE question by hitting <ENTER>.
3. Ready the QUICK tape in your tape recorder.
4. Type: SYSTEM   (and press <ENTER>)
5. Type: QUICK   (and press <ENTER>)
6. QUICK will load in about 10 seconds, and you'll be given the System prompt again: *?
7. If you want to run it in Level II (rather than transfer it to disk), just press the slash ("/") and <ENTER>. QUICK will move itself to high memory and display the "entry point address" you should use to perform compression. This will be explained later on. For now, just write it down for later use, or see the table below for all normal entry points.
8. QUICK will update BASIC's MEMORY SIZE values to protect itself.
9. BASIC's "READY" message will be displayed.

Now, you can CLOAD a BASIC program for compression. (If you're running Level II, please skip down to "PERFORMING COMPRESSION".)

Disk Systems

If you've received QUICK on tape, please follow instruction steps 1-6 above.
Then, when you are given the System prompt again, insert a DOS Operating System
disk in drive 0, and press the <RESET> button. When you get the "DOS READY"
message, use the "DUMP" command to transfer "QUICK/CMD" to disk. If you want it
on drive 0, make sure the System disk is not write-protected. If you want it on drive
1, insert a pre-formatted disk. Then:

```
M1 TRSDOS: DUMP QUICK/CMD (START=X'7000',END=X'72FF',TRA=X'7000')
M3 TRSDOS: DUMP QUICK/CMD (START=7000,END=72FF,TRA=7000)
NEWDOS/80: DUMP QUICK/CMD 7000H,72FFH,7000H
```

QUICK/CMD is now ready for use.

If you received QUICK/CMD on disk, just copy it to a disk of your own. If you
have a one-drive Model I, boot the distribution disk itself. It will prompt you to
insert your own System disk, and will then copy QUICK/CMD to that disk for you. It
is important that you follow each prompt exactly, since you'll have to switch disks
back and forth several times. If you have a one-drive Model III, you'll need to
install QUICK/CMD using someone else's system (for example, the local Radio
Shack, or a friend). If this isn't feasible, send the QUICK disk and a copy of your
TRSDOS to us, and we will perform the installation for a $3.00 copy fee.

Once you've installed QUICK/CMD on disk, we recommend that you make at least
two backups for safety. It is not necessary to back up the distribution diskette, but
you should save it, with the PROSOFT label, in case you need to return it for
updates or maintenance in the future.

QUICK is normally activated as a DOS command. Just type "QUICK" (no quotes).
It relocates itself into high memory based on the value found in the HIMEM pointer,
updates this pointer, and displays a message containing its default entry point. If
it is the first machine-language program loaded into memory, this entry address will
be 48895 (32K systems) or 65279 (48K systems). For other entry points, see the
table later on.

After QUICK is activated, BASIC may be entered. It is not necessary to reply
to the "MEMORY SIZE" question, as QUICK has already protected itself. Once in
BASIC, you may LOAD a BASIC program that is to be compressed.

PERFORMING COMPRESSION

QUICK processes the "in-memory" BASIC program, so you must be in BASIC to use it. Load a BASIC program into memory _after_ QUICK has been activated. Compression is performed by one of these methods:

  1. Model III TRSDOS 1.1 or 1.2:

    Type: DEFUSR=-1*(65536-nnnnn) : X=USR(0)
      and then press <ENTER>

  2. Everything else:

    A. Type: SYSTEM   (and press <ENTER>)
    B. Type: /nnnnn   (and press <ENTER>)

'nnnnn' is an entry point address into QUICK. Normally, this address should be the one displayed by QUICK when it was activated. There are four other entry points available, as shown in the table below. The entry points in this table assume that QUICK is the _first_ program loaded, and that MEM SIZE and HIMEM were not set by you or by another program. If the entry point QUICK displays does not match the entry point value for "REMARKS and BLANKS", then adjust the other four entries accordingly. They are spaced four bytes apart regardless of where QUICK actually resides.

TABLE OF ENTRY POINTS TO "QUICK"

	TO DELETE	SYSTEM MEMORY		
		16K	32K	48K
1.	only blanks preceding remarks	32499	48883	65267
2.	only remarks	32503	48887	65271
3.	remarks and "null" lines	32507	48891	65275
4.	remarks and blanks (safe default)	32511	48895	65279
5.	remarks, blanks, and "null" lines	32515	48899	65283

"Null" lines contain no code or remarks. They are created when lines containing _only_ remarks are compressed. If "null" lines are not referenced by other statements in the BASIC program, they can be deleted also (entry point 5). If you're not sure whether it's safe to delete them, use the default entry point (remarks and blanks).

SAMPLE RUN (Level II, 16K)

    1. Power on.
    2. Type: SYSTEM
    3. Ready the QUICK cassette, then type: QUICK
    4. Copy down the entry point (its probably "32511")
    5. CLOAD a BASIC program
    6. Type: SYSTEM
    7. Type: /32511

    When the "READY" message re-appears, examine the BASIC program through "LIST". It should look ... well ... compressed. If so, CSAVE it (but not over the original BASIC program) and then run it to make sure it works.

    Since QUICK remains available in high memory, it can be re-used on other programs (or the same one, for that matter) without having to re-initialize it.

SAMPLE RUN (Disk)

    1. Power on.
    2. Insert disk(s) and press <RESET>.
    3. Type: QUICK
    4. Get into BASIC
    5. LOAD a BASIC program
    6. Type: SYSTEM (unless using TRSDOS 1.1 or 1.2)
    7. Type: /48895   (if 32K system)
         or: /65279   (if 48K system)

    The results may be checked as described for tape systems. That's all there is to it!

THANK YOU
for choosing
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